

### ABSTRACT

A method for integrating a thin film resistor into an interconnect process flow where one of the metal layers is used as a hardmask. After a via (42) etch and fill, the thin film resistor material (62) is deposited. The metal interconnect layer (76) is then deposited, including any barrier layers desired. The metal leads (70) are then etched together with the shape of the thin film resistor (60). The metal (76) over the thin film resistor (60) is then removed.